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10/549,657	09/16/2005	Stephen Terry Lang	040857/297610	7670

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EXAMINER

MATTHEWS, WILLIAM H

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3774

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,657	Applicant(s) LANG, STEPHEN TERRY	
	Examiner William H. Matthews (Howie)	Art Unit 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11-10-09 have been fully considered but they are not persuasive. In addition, new prior art is cited below.

At page 9 of the Remarks (paragraph 1), Applicant states it is unclear what is the weight responsive valve control arrangement. In response, Examiner maintains the "Arrangement" is met by the arrangement of the valves, pins, and springs shown in figures 6-7.

At paragraph 3 on page 9 Applicant states there is no knee stabilizing function, but it appears Applicant gives the claimed limitation a narrower interpretation than may be reasonably interpreted.

At paragraph 4 on page 9, Applicant argues ball 34 can not meet the valve member of claim 1 because it's not movable toward its open position in response to fluid pressure in the passage. Examiner disagrees. The open position would be in the direction away from the valve seat and fluid pressure upstream causes the ball to move in this direction. This occurs during both flexion and extension (Figure 7).

At paragraphs 1-2 on page 10 Applicant argues the ball 34 is not resisted by a weight responsive valve control arrangement because nothing acts on the ball 34 except fluid. Examiner disagrees because, as may be broadly interpreted, the springs and pins in figure 7 are weight responsive and are capable of resisting movement in the open direction (i.e. limiting the ball from seating against the opposite seat).

Art Unit: 3774

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 15, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites “the valve comprises a main valve in which the valve member” which is unclear if Applicant is calling the originally recited valve of claim 1 a “main valve”, or if a new valve is recited. Therefore the “valve member” is unclear whether it is a valve member of the main valve or the same valve of claim 1.

Claims 15 and 22 recite “the axis of rotation” which lacks proper antecedence.

Claim 22 further contains a grammatical error at the final two lines: “a valve control arrangement substantially to eliminate said differential pressure”.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,7,8,14-19,22, and 24-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner et al US Patent 5,704,945.

Wagner et al discloses a prosthetic knee joint system comprising a first knee part (6), a second knee part (5), a load-activated knee-stabilising device (figures 5-7)

Art Unit: 3774

comprising a fluid-filled fluid displacement chamber (20 & 21), a piston (19) connected to the second knee part (by element 7), first (20) and second (21) variable volume chamber parts, a fluid passage (see Fig. 6 & col. 4, lines 13-20), a valve (31 & 32).

Plunger 23 may also be considered a part of the knee stabilizing device.

Regarding claim 1 lines 11-12 and 16-18, see Figs. 6 & 7, elements 25 or 33.

Regarding claims 7-8, see element 24

Regarding claim 17, see above.

Regarding claim 19, element 33 meets the structural limitations.

Regarding claim 22, see above and axis of rotation 7 (figure 5), and valve control arrangement 23,24 whereby opening of 24 eliminates a pressure differential.

Regarding claim 27: chamber 20/21, first joint part 6, piston 19, second joint part 5, hydraulic valve 31 or 32, valve member 34, piston part 33 and bore (Figure 7). The functional limitations are met during rapid movement.

Regarding claim 28: main hydraulic valve 23,24 or the other of 31/32, primary passage (between 30 and 37 of figure 6).

Claims 1-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Zahedi WO99/08621 (with reference given to US National Stage 6517585).

Zahedi disclose in Figure 1 a knee joint mechanism comprising a lower piston arrangement and upper piston arrangement both providing rotation between first and second knee parts 14/16. Several of the claim limitations are readable on either the top or bottom piston arrangement. Where an element is readable on more than one piston, the bottom piston is described first.

Art Unit: 3774

Regarding claims 1 and 14-16: first and second variable chambers (18E or 18F), piston (18B or 18C), fluid passage (18I or 18G or 18L or 18M), valve and valve member (18G or 18N or 18P), housing (18A), weight responsive valve control arrangement (14B+20+20A+18H or 18O+22+14B).

Claim 2: piston rod 18D is pivotal about knee chassis 14A and shin 16, and is thus considered to meet the limitation of rotary piston which rotates with second knee part.

Claim 3: cavity (about 18G or 18L), pilot valve (18H or 18O), secondary passage (18I or passage in 18O).

Claim 4: shuttle valve (18G or 18N), upstream port (above 18G or left of 18H or right of 18N), downstream port (right of 18H or top of 18L), and control port (18J or 18O).

Claim 5: bleed passage (18G or 18I, or 18O or 18M).

Claim 6: 18O

Claim 7: 18H (bottom) or when 18O or 18P are closed (top).

Claim 8: see bottom piston spring attached to 18H.

Claims 9-10: yield adjuster 18O or 20A.

Claim 11: secondary passage (18I or in 18O).

Claim 12: pilot valve 18H (top only).

Claim 13: interconnected elements 14A/B and 18A/D are resiliently connected via 14C.

Art Unit: 3774

Regarding claim 17: piston 18B or 18C, chambers 18E or 18F, fluid passage 18G or 18I or 18L, valve member 18H or 18G or 18N, and weight responsive valve control arrangement (20+20A or 22+18O/P/Q).

Claim 18: see pivot point at top of rod 18D.

Claim 19: pilot valve 18H or 18P or O, cavity 18L.

Claim 20: bleed passage about 18H or 18G (i.e. bottom only).

Claim 21: interconnected parts 14A and 14B resiliently connected by 14C, pilot valve (18H or 18O or 18P).

Regarding claims 22-26: axis of rotation (top of piston rod 18D), piston 18B or 18C, chamber 18E or 18F, fluid passage 18G or 18I or 18L, valve member 18 G or 18H or 18N,O, or P, valve control arrangement 20+20A+18H+26A+14B or 22+18O+18S+14B+26A+24).

Regarding claim 27: chambers (18E), piston 18B, hydraulic valve/member 18H, inlet port (left of 18H), outlet port (right of 18H or 18J). Valve member 18H is resiliently biased due to spring toward the closed position and would be caused to move toward open position due to flexion. Piston part is readable on the shaft of 18H located in a bore. Note the left side of 18H is shown to be about twice the size of the passage to the right of 18H. Hydraulic is also given its broadest reasonable interpretation which includes both liquids and gases.

Wagner et al discloses a prosthetic knee joint system comprising a first knee part (5), a second knee part (6), a load-activated knee-stabilising device (8), a fluid-filled fluid displacement chamber (20 & 21), a piston (19) connected to the second knee part (by element 7), first (20) and second (21) variable volume chamber parts, a fluid passage (see Fig. 6 & col. 4, lines 13-20), a valve (31 & 32).

Regarding claim 1 lines 11-12, see Figs. 6 & 7.

Regarding claim 1, lines 16-18, see col. 4, lines 13-39.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Matthews (Howie) whose telephone number is 571-272-4753. The examiner can normally be reached on Monday-Friday 10-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Matthews/
Primary Examiner AU 3774